



**UNIVERSITY OF ALBERTA**  
**FACULTY OF SCIENCE**  
Department of Computing Science

# SOFTWARE PRODUCT MANAGEMENT

STANLEY'S PROBLEM: PART 4  
ESTIMATE VELOCITY

# Estimating Velocity

Now it's time to estimate the velocity of the team. Since this is a new project, you haven't had enough data to calculate your team's velocity based on the amount of work that has been completed in previous *sprints*. However, you recall that you and the team have worked on several projects before, and there is one specific project that is somewhat similar to the one you are building. Before using this "historical" value as the velocity for this project, you want to clarify a bunch of questions with your team.

You set up a meeting with the development team and discuss the following questions with them:

- **Is the technology the same?**

The senior developer, Madison, tells you they are planning to use the same technology for the front-end but will change the backend solution to a Backend-as-a-Service(BaaS) platform called Firebase. This platform will provide services for authentication, database, hosting, and push notifications. The good thing about it is that it handles those difficult parts so the development team can focus on the business logic. If successful, switching to it will save the development team quite some time.

- **Will the new technology require lots of time to learn?**

Your team tells you that it would not be the case: Google supports the platform, and every service is well documented. Therefore, it is reliable and easy to use. Plus, Alex already had some experience using it before, so they expect the switch to be smooth. The team is excited about this change, and at this stage of development, they estimate there will be no additional time required to learn this new technology.

Now that you understand the tech stack, and how that will remain relatively the same in terms of velocity, you still need to sort some more questions out before moving forward.

Therefore, you ask yourself the following questions:

- **Is the development team the same?**

Almost the same - Andrew left, and Sam joined. The rest of the members remain the same.



- **Is the working environment the same?**

Most certainly not - the team is now geographically distributed and everyone is working from home. Planning and communicating will become more of a challenge. Software like Zoom and Trello are also more critical to the success of the project. (But, people get to save some time on the commute!)

After considering each aspect, you think this past project experience is precious. In that project, the development team has completed 20 story points per sprint. You decide to use this historical value as the team's velocity.

Estimate Velocity: 20 story points per sprint.

